

Material Safety Data Sheet

Company Details

A&E Metal Merchants
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Product Name: Silver Solder
Date Revised: 25/05/2011

This Material Safety Data Sheet (MSDS) summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace.

Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace. The use should be considered also in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact A&E Metal Merchants.

Identification

Product Name:	Silver Solder
Proper Shipping Name:	None Allocated
Other Names:	Name Easy Medium Hard IT
UN Number:	None Allocated
DG Class:	None Allocated
Packing Group:	None Allocated
Hazchem Code:	None Allocated
Poisons Schedule:	Not Scheduled
Product Use:	Silver solder. Recommended for use with Flux Ezi-Weld 602 or Flux Ezi-Weld 603
Appearance:	Strip, wire
Melting Point:	705C – 778C
Boiling Point:	Not applicable
Vapour Pressure:	Not applicable
Flash Point:	Not applicable
Flammable Limit LEL	Not applicable
Flammable Limit UEL	Not applicable

Other Properties

Volatile Component:	Not applicable
Auto ignition Temp:	Not applicable
Evaporation Rate:	Not applicable
Vapour Density:	Not applicable
pH Value:	Not applicable
Stability:	Stable
Haz. Polymerization:	Will not occur
Materials to Avoid:	Acids and acetylene.

Ingredients

Silver	60 – 100%
Copper	10 – 60%
Zinc	0 – 60%

Health Hazard Information

Health Effects

Acute Swallowing:	Unlikely route of exposure
Acute – Eye:	Irritation due to zinc oxide component may occur.
Acute – Skin:	Irritation due to zinc oxide component may occur.
Acute – Inhaled:	Inhalation of product fumes may cause irritation of the nose, throat and respiratory system.
Chronic:	Inhalation of metal oxides formed by combustion may lead to “metal-fume fever”, a flue like illness which causes a metallic taste in the mouth, throat irritation and dry cough. Symptoms of metal fume fever are often delayed for 3-10 hours and usually disappear after 24 hours rest. Chronic absorption of silver can cause argyria, a bluish discolouration of the various tissues, but this is unlikely to occur when handling silver alloys. Prolonged exposure to copper may cause skin irritation or discolouration of the skin or hair.

First Aid

Swallowed	Do not induce vomiting. Wash out mouth with water and give plenty of water to drink. If symptoms develop seek medical attention.
Eye	If contact with the eye occurs, wash with copious amounts of water for approximately 15 minutes holding eyelid open. Take care not to rinse contaminated water into the non-affected eye. If symptoms persist seek medical attention.

Skin	Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. If symptoms develop seek medical attention.
Inhaled	Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have qualified person give oxygen through a face mask if breathing is difficult. If symptoms develop seek medical attention.
First Aid Facilities	Eye wash and normal washroom facilities

Advice To Doctor

Advice To Doctor	Treat symptomatically
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Other Health Hazard Information

Precautions For Use

Exposure Limits

	mg/m ³ (STEL)	mg/m ³ (TWA)
Silver		0.1
Copper		0.2
Zinc	10	5.0

TWA Footnote - as zinc oxide(fume)

Eng Controls	Ensure sufficient ventilation to keep airborne concentrations below exposure limits. Mechanical exhaust ventilation may be required.
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Personal Protection

Respirator	If engineering controls are not effective in controlling airborne exposure then a supplied air respirator with an AS 1716 approved P1 or P2 particulate filter should be used. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and maintenance of Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.
Eye Protection	Wear chemical momo-goggles or full face shield if splashes are likely to occur.
Glove Type	Welding gloves
Protective Equipment	Overalls, eyewash unit, aprons, sleeves, shoulder covers, leggings or spats of pliable flame resistant leather or other suitable materials may also be

Work/Hygiene Practices required in position where these areas of the body will encounter hot metal.

Ensure a high level of personal hygiene is maintained when using this product. Always wash hands before eating, drinking, smoking or using the toilet.

Flammability

Fire Hazards This alloy is not pyrophoric.

Safe Handling Information

Storage and Transport

Store in original containers. Store away from incompatible materials. Copper and some copper alloys can form explosive acetylides when exposed to acetylene. As with many metals and alloys, contact with mineral acids liberates hydrogen, a flammable and explosive gas. Store away from acids and acetylene.

Transport Not classified as a Dangerous Good, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Proper Shipping Name None Allocated

Spills and Disposals

Spills & Leaks Wear appropriate protective clothing to minimise skin and eye exposure. Collect material for re-use or for disposal.

Disposal Dispose of according to relevant local, state and federal government regulations.

Fire/Explosion Hazard

The alloy is not pyrophoric. However, if involved in a fire generated by other means, resulting in temperatures in excess of 600C, toxic fumes of copper and zinc oxides may be evolved.

Hazardous Combustion Products Toxic fumes of copper and zinc oxides

Fire Fighting Procedures Fire fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode.

Extinguishing Media	Use appropriate fire extinguisher for surrounding environment. Subject to the presence of electrical shock risks, use of water fog is preferred.
Hazchem Code	None Allocated

Other Information

Toxicology	No toxicology data is available for this product.
Environmental Protection	Prevent this material entering waterways, drains and sewers.

End of MSDS

Version 1.1